

The claims defining the invention are as follows:

1. A method of navigating in a multidimensional space containing an electronic publication formed from predefined portions of text-based data encoded using a markup language, said method including the steps of:
 - displaying a selected one of said predefined portions in a first display region; and
 - displaying a point on a primary axis of said multidimensional space for said displayed predefined portion.
2. The method according to claim 1, further including the step of:
 - displaying a second point on a second axis derived from said first point.
3. The method according to claim 2, further including the step of:
 - displaying information regarding said second point of said second axis in a second display region.
4. The method according to claim 2, allowing the display of any number of points, and any number of axes derived from said first point.
5. The method according to claim 4, wherein points are displayed in two display regions.
6. The method according to claim 4, for navigating among points, axes or both, and for returning to said first point when required.

7. The method according to claim 1, wherein said first point is an anchor.

8. The method according to claim 2, wherein said second axis represents time-based versions of said selected one of said predefined portions.

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9. The method according to claim 1, wherein said predefined portion is a provision of legislation.

10. The method according to claim 2, wherein said second axis represents search criteria and results corresponding to said selected one of said predefined portions.

11. A method of navigating in a multidimensional space containing an electronic publication formed from predefined portions of text-based data encoded using a markup language, said method including the steps of:

- 15 providing a view comprising at least two anchor sets;
 displaying at least one base point and at least a first axis depending from said base point;
 displaying at least one of a further point and an axis derived from said base point;
20 navigating a multidimensional space formed by said points and axes;
 returning to said base point when required; and
 adjusting the view so a current view point becomes a new base point.

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12. An apparatus for navigating in a multidimensional space containing an electronic publication formed from predefined portions of text-based data encoded using a markup language, said apparatus including:

a first display region;

5 means for displaying a selected one of said predefined portions in said first display region; and

means for displaying a point on a selected axis of said multidimensional space for said displayed predefined portion.

10 13. The apparatus according to claim 12, further including:

means for displaying a second point on a second axis derived from said first axis at said first point.

14. The apparatus according to claim 12, further including:

15 a second display region;

means for displaying information regarding said second point of said second axis in said second display region.

15. The apparatus according to claim 13, allowing the display of any number of
20 points, and any number of axes derived from said first point.

16. The apparatus according to claim 15, further including:

a second display region;

means for displaying said points in said first and second display regions.

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17. The apparatus according to claim 15, further including:
means for navigating among points, axes or both, and returning to said first point
when required.
- 5 18. The apparatus according to claim 12, wherein said first point is an anchor.
19. The apparatus according to claim 13, wherein said second axis represents time-
based versions of said selected one of said predefined portions.
- 10 20. The apparatus according to claim 12, wherein said predefined portion is a
provision of legislation.
21. The apparatus as claimed in claim 13, wherein said second axis represents search
criteria and results corresponding to said selected one of said predefined portions.
- 15 22. An apparatus for navigating in a multidimensional space containing an electronic
publication formed from predefined portions of text-based data encoded using a markup
language, said apparatus including:
means for providing a view comprising at least two anchor sets;
20 means for displaying at least one base point and at least a first axis depending
from said base point;
means for displaying at least one of a further point and an axis derived from said
base point;
means for navigating a multidimensional space formed by said points and axes;
25 means for returning to said base point when required; and

means for adjusting the view so a current view point becomes a new base point.

23. A computer program product having a computer readable medium having a computer program recorded therein for navigating in a multidimensional space containing an electronic publication formed from predefined portions of text-based data encoded using a markup language, said computer program product including:

computer program code means for displaying a selected one of said predefined portions in a first display region; and

- computer program code means for displaying a point on a selected axis of said multidimensional space for said displayed predefined portion.

24. The computer program product of claim 23, further including:

computer program code means for displaying a second point on a second axis derived from said first axis at said first point.

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25. The computer program product according to claim 23, further including:

computer program code means for displaying a second display region;

computer program code means for displaying information regarding said second point of said second axis in said second display region.

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26. The computer program product according to claim 24, allowing the display of any number of points, and any number of axes derived from said first point.

27. The computer program product according to claim 26, further including:

computer program code means for displaying a second display region;

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computer program code means for displaying said points in said first and second display regions.

28. The computer program product according to claim 26, further including:

5 computer program code means for navigating among points, axes or both, and for returning to said first point when required.

29. The computer program product according to claim 23, wherein said first point is an anchor.

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30. The computer program product according to claim 24, wherein said second axis represents time-based versions of said selected one of said predefined portions.

31. The computer program product according to claim 23, wherein said predefined
15 portion is a provision of legislation.

32. The computer program product as claimed in claim 24, wherein said second axis represents search criteria and results corresponding to said selected one of said predefined portions.

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33. A computer program product having a computer readable medium having a computer program recorded therein for navigating in a multidimensional space containing an electronic publication formed from predefined portions of text-based data encoded using a markup language, said computer program product including:

computer program code means for providing a view comprising at least two anchor sets;

computer program code means for displaying at least one base point and at least a first axis depending from said base point;

5 computer program code means for displaying other points, axes or both derived from said base point;

computer program code means for navigating a multidimensional space formed by said points and axes;

computer program code means for returning to said base point when required;

10 and

computer program code means for adjusting the view so a current view point becomes a new base point.

34. A method of publishing an electronic publication formed from predefined portions of text-based data encoded using a markup language, said method including the steps of:

storing predefined portions in terminal nodes; and

providing one or more higher level nodes for organising said terminal nodes to correspond with a hierarchical structure embodied in said electronic publication, wherein each higher level node consists of the identity of a parent node, a position indicator for said higher level node, and an identifier.

35. The method according to claim 34, wherein one of said higher level nodes has a null parent node identity.

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36. The method according to claim 34, comprising the further step of:
associating each of said predefined portions with a corresponding scope defining
the time during which each said predefined portion is valid.

5 37. The method according to claim 34, wherein said position indicator indicates a
position of said higher level node relative to a sibling node.

38. The method according to claim 34, including the further step of:
storing at least one modified portion in said terminal nodes.

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39. The method according to claim 34, wherein said predefined portions correspond
to a relational database represented in flat file records.

40. The method according to claim 34, including the further steps of:
15 dividing XML data into predefined portions; and
storing said predefined portions as flat files.

41. The method according to claim 40, wherein said terminal node includes a label
of said publication.

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42. The method according to claim 41, wherein said label is data associated with a
higher level node of said terminal node.

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43. The method according to claim 34, wherein each said terminal node includes the identity of a parent node, a position indicator for said terminal node, and an identifier.
- 5 44. The method according to claim 43, wherein said position indicator indicates a position of said terminal node relative to a sibling node.
45. The method according to claim 36, wherein each said terminal node is identified by the combination of said terminal node's identifier and scope.
- 10 46. The method according to claim 36, wherein the scope associated with a higher level node is dependent upon one or more scopes of one or more corresponding descendant nodes.
- 15 47. The method according to claim 43, wherein said terminal node includes one of said predefined portions and said at least one modified portions.
48. The method according to claim 43, wherein said terminal node includes a label of said publication.
- 20 49. The method according to claim 48, wherein said label is data associated with a higher level node of said terminal node.
50. The method according to claim 34, wherein said predefined portion includes text
- 25 associated with a commentary.

57. The apparatus according to claim 54, wherein said position indicator indicates a position of said higher node relative to a sibling node.
- 5 58. The apparatus according to claim 54, further including:
means for storing at least one modified portion in said terminal nodes.
59. The apparatus according to claim 54, wherein said predefined portions correspond to a relational database represented in flat file records.
- 10 60. The apparatus according to claim 54, further including:
means for dividing XML data into predefined portions; and
means for storing said predefined portions as flat files.
- 15 61. The apparatus according to claim 60, wherein said terminal node includes a label of said publication.
62. The apparatus according to claim 61, wherein said label is data associated with a higher level node of said terminal node.
- 20 63. The apparatus according to claim 54, wherein each said terminal node includes the identity of a parent node, a position indicator for said terminal node, and an identifier.
64. The apparatus according to claim 61, wherein said position indicator indicates a position of said terminal node relative to a sibling node.
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65. The apparatus according to claim 56, wherein each said terminal node is identified by the combination of said terminal node's identifier and scope.
- 5 66. The apparatus according to claim 56, wherein the scope associated with a higher level node is dependent upon one or more scopes of one or more corresponding descendant nodes.
67. The apparatus according to claim 61, wherein said terminal node includes one of
10 said predefined portions and said at least one modified portions.
68. The apparatus according to claim 61, wherein said terminal includes a label of said publication.
- 15 69. The apparatus according to claim 68, wherein said label is data associated with a higher level node of said terminal node.
70. The apparatus according to claim 54, wherein said predefined portion includes text associated with a commentary.
- 20 71. The apparatus according to claim 56, wherein said scope includes a start date and an end date.
72. The apparatus according to claim 71, wherein said scope further includes an
25 update date.

73. The apparatus according to claim 70, wherein said predefined portion has a scope including a start date, an end date and an update date, said update date being later than said start date and earlier than said end date.

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74. A computer program product having a computer readable medium having a computer program recorded therein for publishing an electronic publication formed from predefined portions of text-based data encoded using a markup language, said computer program product including:

10 computer program code means for storing predefined portions in terminal nodes;
and

computer program code means for providing one or more higher level nodes for organising said terminal nodes to correspond with a hierarchical structure embodied in said electronic publication, wherein each higher level node consists of the identity of a
15 parent node, a position indicator for said higher level node, and an identifier.

75. The computer program product according to claim 74, wherein one of said higher level nodes has a null parent node identity.

20 76. The computer program product according to claim 74, further including:
computer program code means for associating each of said predefined portions with a corresponding scope defining the time during which each said predefined portion is valid.

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77. The computer program product according to claim 74, wherein said position indicator indicates a position of said higher node relative to a sibling node.

78. The computer program product according to claim 74, further including:
5 computer program code means for storing at least one modified portion in said terminal nodes.

79. The computer program product according to claim 74, wherein said predefined portions correspond to a relational database represented in flat file records.

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80. The computer program product according to claim 74, further including:
computer program code means for dividing XML data into predefined portions;
and
computer program code means for storing said predefined portions as flat files.

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81. The computer program product as claimed in claim 80, wherein said terminal node includes a label of said publication.

82. The computer program product according to claim 81, wherein said label is data
20 associated with a higher level node of said terminal node.

83. The computer program product as claimed in claim 74, wherein each said terminal node includes the identity of a parent node, a position indicator for said terminal level node, and an identifier.

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84. The computer program product according to claim 81, wherein said position indicator indicates a position of said terminal node relative to a sibling node.
85. The computer program product according to claim 76, wherein each said terminal node is identified by the combination of said terminal node's identifier and scope.
86. The computer program product according to claim 76, wherein the scope associated with a higher level node is dependent upon one or more scopes of one or more corresponding descendant nodes.
87. The computer program product according to claim 81, wherein said terminal node includes one of said predefined portions and said at least one modified portions.
88. The computer program product according to claim 81, wherein said terminal node includes a label of said publication.
89. The computer program product according to claim 88, wherein said label is data associated with a higher level node of said terminal node.
90. The computer program product according to claim 74, wherein said predefined portions includes text associated with a commentary.
91. The computer program product according to claim 76, wherein said scope includes a start date and an end date.

92. The computer program product according to claim 91, wherein said scope further includes an update date.

5 93. The computer program product according to claim 90, wherein said predefined portion has a scope including a start date, an end date and an update date, said update date being later than said start date and earlier than said end date.

94. A method of publishing an electronic publication formed from predefined
10 portions of text-based data encoded using a markup language, said method including the steps of:

storing predefined portions in terminal nodes; and

providing one or more higher level nodes for organising said terminal nodes to
correspond with a hierarchical structure embodied in said electronic publication, wherein
15 each higher level node consists of the identity of a parent node, a position indicator for said higher level node, and an identifier, said predefined portion includes text associated with a commentary, and a scope including a start date, an end date and an update date, said update date being later than said start date and earlier than said end date.

20 95. The method according to claim 50, wherein said predefined portion has a scope including a start date and an update date, said update date being later than said start date.

96. The apparatus according to claim 70, wherein said predefined portion has a
scope including a start date and an update date, said update date being later than said start
25 date.

97. The computer program product according to claim 90, wherein said predefined portion has a scope including a start date and an update date, said update date being later than said start date.

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